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ABSTRACT

In an effort to recognize, define, and measure the capacity of the individual to endure and develop in the context of adverse conditions and to recognize the individual's ability to recover from adversity, the behavioral sciences have introduced and advanced the construct of resilience. Resilience has become a popular construct encompassing many different variables including personal characteristics, coping processes, the development of other associated constructs such as hardiness and sense of coherence, and risk and protective factors. Resilience has become an umbrella term to cover many aspects of overcoming adversity and adapting to one's environment. This variability in the application of the construct of resilience has led to some confusion and controversy in the definition and utility of resilience and if it is a valuable construct that can be empirically examined, studied, and utilized in interventions. This paper looks at the question of what resilience is, based on the summarization of extant literature, in order to advance scientific inquiry. (Contains 3 figures and 39 references.) (JDM)

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Challenges to the Definition of Resilience

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In an effort to recognize, define, and measure the capacity of the individual to endure and develop in the context of adverse conditions and to recognize the individuals' ability to recovery from adversity, the behavioral sciences have introduced and advanced the construct of resilience to advance this line of scientific inquiry. Resilience has become a popular construct encompassing many different variables including personal characteristics, coping processes, development of other associated constructs such as hardiness and sense of coherence and risk and protective factors. Resilience has become an umbrella term to cover many different aspects of overcoming adversity and adapting to one's environment. This variability in the application of the construct of resilience has led to some confusion and controversy in the definition and utility of resilience and if it is a valuable construct that can be empirically examined, studied and utilized in interventions. The purpose of this presentation, based on the summarization of extant literature is to advance this line of scientific inquiry by addressing the critical question: What is resilience?

The Definition of Resilience

Resilience has been broadly defined as the ability to bounce back or to overcome adversity. Another broad definition of resilience is to successfully adapt to adverse conditions (Norman, 2000). According to Luthar, Cicchetti and Becker (2000), "resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity. Consequently, Luthar and associates (2000) discuss two (2) critical conditions when conceptualizing resilience: (a) exposure to threat or adversity and (b) achievement of positive adaptation ((Garmezy, 1990; Luthar & Zigler, 1991; Masten, Best, & Garmezy, 1990; Rutter, 1990; Werner & Smith, 1982; 1992).

The same elements of resiliency have served to guide efforts to advance the measurement and operationalization of resilience in research, Luthar and Cushing (1999; see also Rutter, 1981)

The Conceptualization of Resilience

Recent efforts to advance the study of resiliency have conceptualized resilience from four interrelated but distinct perspectives: (a) as good outcomes despite adversity, (b) as sustained competence under stress (c) as recovery from trauma and (d) as the interaction between protective and risk factors (Jessor, 1993; Kumpfer, 1993; Masten et al, 1990 Norman, 2000; Rutter, 1987). The first method, examining good outcomes despite adversity focuses on conceptualization of resilience as an outcome. Rutter (1990) has described resilience as a positive outcome in overcoming adversity such as chronic poverty. The two other perspectives have emerged in the literature: one emphasizes the importance of individual competence under stress and recovery from trauma, and the other conceptualizes and attempts to measure resilience as a process. Garmezy and colleagues (Garmezy, 1993; Masten et al, 1990) have "described resilience as a capacity for successful adaptation in the face of hardship" (Glantz & Sloboda, 1999). The literature is also replete with it emphasis on the dynamic interplay between protective and risk factors, thus contributing to the definition of resilience as an interaction effect as it relates to outcome variables. These different strategies to advance the study of resilience, have contributed to the emergent confusion in the promotion of the study of resilience as a viable construct in explaining human behavior in the face of adverse conditions. The multiplicity of perspectives about resilience has also served to advance this line of study by promoting theory building and the measurement strategies of the construct.

Factors That Contribute to Variation in the Definition of Resilience

Given the four perspectives in conceptualization of resilience, the literature recognizes the resultant variability in the definition of resilience (Kaplan, 1999). The literature draws attention to the pressing need to clarify the relationship between resilience as a cluster of competencies and the outcome of the individuals' efforts in the face of adversity. . The first are of variability is the relationship between resilience and outcome factors e.g. defining resilience a moderator or mediating variable when examining the relationship between adversity and outcome. The second area of variability according to Kaplan (1999) is the variation in conceptualization of resilience as primarily a set of outcomes. Outcomes have also been defined in many different ways such as acquisition of social skills, as emotional development and/or as academic achievement. Resilience as outcomes has also been examined in terms of negative scenarios such as drug use, juvenile delinquency or increased sexual activity. Resilience as outcome has also been approached from the perspective of positive factors such as psychological well-being, self-efficacy or self-esteem. The third area of variability is defining and operationalizing the emergent elements of resilience that appear to influence outcomes (Kaplan, 1999). Examples from the literature of variables that influence or affect outcomes include coping skills, attitudes towards obstacles, or environmental factors such as family support or community involvement.

The last area of variability and a dominant arena in the study of resilience is guided by the perspective that resilience must also be viewed as the cluster of risk factors, which gives meaning to the human response of enduring and recovering from adversity. The literature in inclusive of scientific efforts to measure the significant events in one's life

over a period of time (Luthar & Cushing, 1999; L. McCubbin, Tierney & McCubbin, in press). These events can be both positive events (e.g. birth of a child, marriage) and negative events (e.g. death in family, illness). An example of a measure of significant events is the Life Events Scale (Holmes and Rahe, 1967). Another method is to examine a specific stressor such as a natural disaster (e.g. earthquake, hurricane) or a particular event (e.g. divorce, loss of a parent). The third method of examining risk factors is to look at chronic stressors or the sequencing/constellation of stressors (Luthar & Cushing, 1999; L. McCubbin et al, in press). An event such as a divorce can lead to other chronic stressors such as a loss of a parent physically (e.g. living outside the home) leading to significantly reduced income in the family which can involve moving to an apartment and changing lifestyles. The literature suggests that the study of resilience is a special and unique case in the continuum of stress research in its emphasis on the human capacity to overcome extreme trauma and/or the capacity to endure in the face of a cluster of life events which under normal conditions one would predict deterioration and dysfunction as the most likely individual outcome.

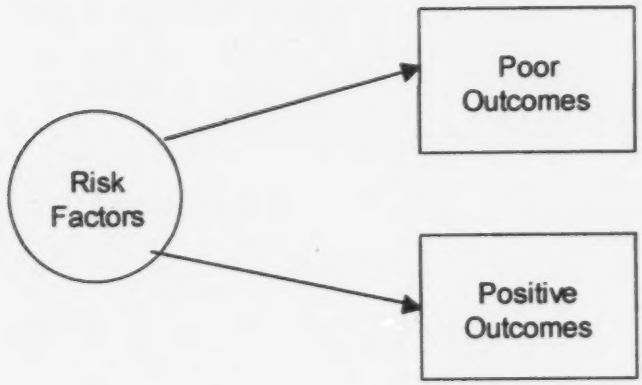
Conceptualizing Resilience in Research

There are many possible ways to conceptualize resilience in research. In this paper, we will focus on two possible frameworks to conceptualize resilience: (a) as an outcome and (b) as a process.

Resilience as an outcome in research has usually involved comparing two groups, one classified as having poor outcomes such as crime, teenage pregnancy, or drug and alcohol abuse and the other group classified as having positive outcomes such as retention in school, academic achievement or positive, healthy relationships (see figure

1). The first group has been referred to as the vulnerable or at-risk group while the other group has been called the invulnerable group including those individuals who turned out "well" (Seifer & Sameroff, 1987). Often outcomes are viewed as dichotomies when the reality is it is a matter of degree (Glantz & Sloboda, 1999; Luthar, Doernberger, & Zigler, 1993).

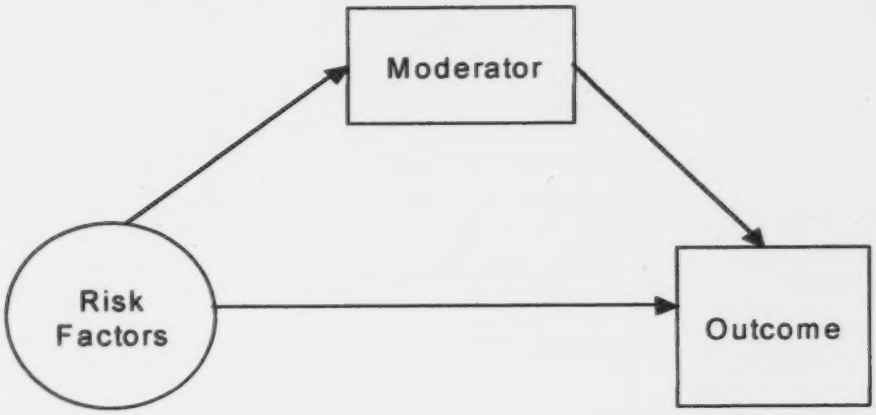
Figure 1: Resilience as an Outcome



Resilience as a Process

Resilience can also be conceptualized as a process, a factor that influences or can cause positive/negative outcomes. Resilience can be considered a construct that moderates the relationship between risk factors and outcome variables.

Figure 2: Resilience as a Process



There are multiple moderating variables that have been examined in the resilience literature. One example is the concept of hardiness (Kobasa, 1979; Kaplan, 1999). Hardiness consists of three characteristics: (a) commitment, (b) control and (c) challenge (Kobasa, 1979; Maddi & Kobasa, 1991). Commitment refers to having the sense that the environment is satisfying (Maddi & Kobasa, 1991) rather than a sense of alienation (Maddi & Kobasa, 1991). The second characteristic of hardiness is control, having the confidence in one's capacity to master life's events and tasks. The opposite of control is a sense of powerlessness (Maddi & Kobasa, 1991). The last characteristic is challenge, which is a sense of possibilities in life and a belief that change is normal (Kobasa, 1979; Maddi & Kobasa, 1991). This belief that life is a challenge rather than the opposite, viewing life as a threat. Hardiness is just one example of a moderator that has been examined in the research in looking at the process of resilience. Hardiness can moderate the negative effects of life events by the ability to reconceptualize a stressor or event. By

this reconceptualization, one can develop adaptive coping patterns following negative events (Gentry & Kobasa, 1984 as cited in Kaplan, 1999).

Resilience has also been examined as a process in terms of thriving in the face of adversity also referred to as posttraumatic growth (Tedeschi & Calhoun, 1995; Tedeschi, Park, & Calhoun, 1998). This posttraumatic growth can involve several outcomes and/or processes. Examples of elements of thriving in the face of adversity can include increased self-reliance and personal strength, recognition and appreciation of vulnerability, change in relationships with others and change in philosophy of life (Tedeschi & Calhoun, 1995). As Kaplan (1999) states "resilience...permits achieving levels of development that go beyond that which would have been reached in absence of stress" (p. 25).

After examination of the variation in the definitions of resilience and the presentation of two possible ways of conceptualizing resilience (e.g. as an outcome or process), one question that comes up is: Is resilience a process or an outcome? A reasonable response would be "It depends." Kaplan (1999) points out that there is confusion as to which of the two definitions of resilience in a researcher is intending in a research study. Variables such as the phenomenon the researcher wants to study, the method by which he/she studies the phenomenon, the prediction of the relationship between risk factors and positive adaptation and the operationalization of the constructs being researched all contribute to the defining of the resilience construct. Staudinger and associates (1993 as cited in Kaplan, 1999) state " the distinction between the protective factors and mechanism underlying resilience, as an outcome can be quite arbitrary" (p. 544). A lack of distinction among variables and the conceptualization of resilience can

lead to differing profiles of what is competent adaptation and who is resilient (Cicchetti & Garmezy, 1993). Researchers need to be clear in how they are conceptualizing resilience whether it is as an outcome or a process. Another way of conceptualizing resilience is examining the interaction between protective and risk factors.

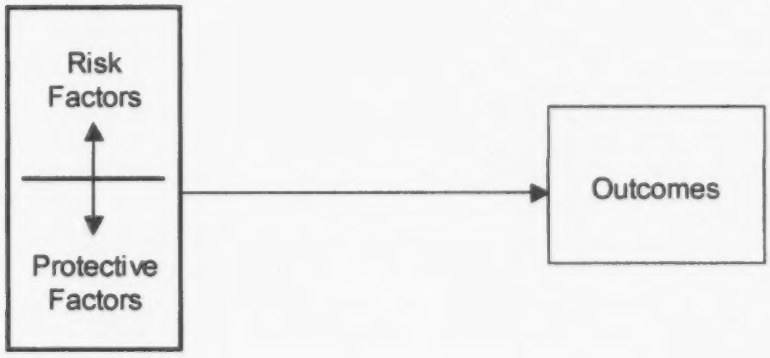
Resilience versus Protective Factors

The term protective factor, like resilience, has not been clearly defined (Norman, 2000). Protective factors can be divided into two categories, internal protective factors such as self-esteem or self efficacy and external protective factors such as family support or community involvement. An example of this categorical system is the Developmental Assets framework developed by the Search Institute (Scales & Leffert, 1999). The external assets within this framework are further classified into the following subcategories: support, empowerment, boundaries and expectations, and constructive use of time. Internal assets are divided into four subcategories: commitment to learning, positive values and social competencies. Examples of external protective factors or assets can include family support and communication, caring school environment and role models. Internal protective factors can include honesty, sense of responsibility, ability to restrain oneself or decision-making abilities.

Protective factors have been examined in relationship to risk and outcome variables in many different ways (see figure 3). Protective factors can be a buffer against risk factors can moderate risk factors and protect against poor outcomes (Jessor, 1993; Kumpfer, 1993; Masten et al, 1990; Rutter, 1987 as cited in Norman, 2000). However some researchers argue that protective factors can only be defined in connection with risk factors because of their interrelatedness (Rutter, 1979). This conceptualization of

protective factors refers to the interaction effect of risk and protective factors. The interaction between risk and protective factors is important in examining outcome variables over time as they may shift and change depending on the nature of the problem and the timing of significant events. According to Werner (1989) the more risk factors that are present, the more protective factors are needed to compensate. This is related to the concept of adversity or stress being additive over time (Norman, 2000), i.e. the larger the risk factors, the more likely maladaptive behaviors or outcomes will occur (Cowen et al, 1990; Garmezy, 1985; Masten et al, 1990; Rutter, 1979; Werner, 1989 as cited in Norman, 2000). Therefore more protective factors are needed in order to ameliorate or protect one from poor developmental outcomes.

Figure 3: Risk and Protective Factors



Beauvias and Oetting (1999) make a distinction between protective factors and the concept of resilience. Protective factors operate by increasing the chances of prosocial behaviors and norms (Beauvias & Oetting, 1999). However while protective factors operate consistently and all the time, resilience operates only when problems or

adversity appears. Beauvias and Oetting (1999) state that protective factors save you from disaster whereas resilience lets you bounce back. This distinction between protective factors and resilience needs to be considered when evaluating one's research and the constructs one is interested in examining.

Differentiation of Resilience from Other Concepts

Luthar and associates (Luthar, 1996; Luthar et al, 2000) discuss the difference between resilience and ego-resiliency. Ego-resiliency refers to a personality characteristic of an individual. It differs however from resilience as it does not require adversity or exposure to stressors. Resilience, according to Luther and her colleagues (2000), is a dynamic developmental process requiring exposure to risk or adversity.

There is also confusion over the term resiliency or resilient rather than resilience. Resiliency is often used to refer to resilience in terms of the dynamic process. However resiliency implies that it is a personal characteristic (Luthar et al, 2000). Researchers who use the term resiliency though are defining it in terms of the two conditions of risk and positive adaptation of an individual (Masten et al, 1990; Rutter, 1993; Werner, 1984). Masten (1994) recommends using the term resilience as it considers the competence component despite adversity rather than use resiliency given the misleading connotation of resilience as a personal attribute.

The Myth of the Invulnerable Child

Anthony (1987) used the term "psychologically invulnerable" to refer to children that were able to maintain emotional competence despite adversity. However there is little evidence to support an absolute or universal concept of resilience or an invulnerable individual (Fisher, Kokes, Cole, Perkins & Wynne, 1987; Glantz & Sloboda, 1999;

Luthar et al, 2000; Pellegrini, 1990). Anthony (1974) found that individuals who seemed to be "invulnerable" at one stage in their life may develop negative outcomes later in life. For example, a high school student may avoid drug use or other negative behaviors by focusing on academic achievement. However he or she may develop other problems later on in life due to lack of social skills or close relationships with peers. The concept of a "invulnerable" child or adult is misleading as a sense of vulnerability may depend on the situation and/or developmental level.

Rather than looking at a global resilience factor or an "invulnerable" individual, Glantz and Sloboda (1999) recommend that "the more specific the statement of negative circumstances, the more useful the attribution and the more heterogeneity and mechanism of resilience can be understood" (p. 116). They argue that resilience is a concept that is only meaningful in the context of a specific problem or stressor(s).

Challenges to the Construct of Resilience

One challenge to the construct of resilience is related to its critical conditions (e.g. adversity or risk and competence or adaptation), that is the dynamic, developmental aspects of risk and competence. What may be considered a risk factor or stressor in childhood may be very different compared with those stressors adults face. Also how one copes or adapts to these stressors can change over time as one accumulates more experience and knowledge about the world. Cicchetti & Garmezy (1993) point out that resilience is not static and is likely to change over time. Psychosocial development changes over time and can vary across different cultures (Masten, 1994). The dynamic aspect that makes resilience unique to other constructs is also its greatest challenge.

When defining resilience, one needs to consider a person's age or psychological capacity to develop certain skills or behaviors to overcome adversity.

Another dynamic aspect related to resilience is the diversity in circumstances or stressors. One can be considered resilient in one situation facing one stressor like work overload but be vulnerable and at risk for marital and familial problems. As people change and grow over time, circumstances and unique challenges can also change. Circumstances need to be considered when evaluating an individual or group as "resilient" as this may shift in different contexts. Individuals in research may be judged as resilient based on one set of criteria but be at-risk by a different study or a different set of criteria. Thus specificity in terms of adversity and outcome needs to be clearly articulated and well defined in research in order to make more accurate predictions of behaviors.

Also protective factors may change depending on circumstances and time. What may be a protective factor when one is young such as a strict family household and a strong religious affiliation may be a risk factor for rebellion in adolescence. Therefore qualities, environmental factors and personal attributes may change in their categorization between risk and protective factors. This points to the false sense of a dichotomy between positive and negative outcomes and risk and protective factors. It may be more appropriate to examine variables in terms of degrees rather than in an either/or manner.

The last issue that needs to be considered is the cultural implications of the concept of resilience. What one culture may define as successful such as independence, moving away from one's family to establish one's own sense of identity may be viewed

as a failure in another culture. That same independence can be viewed as abandonment of certain cultural values such as commitment to one's family and meeting familial obligations first even if it is at the sacrifice of individual needs. Therefore researchers need to recognize that defining the construct of resilience can be culturally bound by the worldview of the researcher and the culture of the psychological field.

Conclusions

Understanding and predicting human behavior in the face of adversity and extreme odds has emerged as an important line of scientific inquiry in the search for those human capacities and competencies, which may play a critical role in shaping the outcome. Resilience has, in recent time, emerged as the single most important construct in the advancement of research in this area. These emergent arenas of research and application emphasizing resilience however is at an embryonic stage of development as a special case of stress research. Undaunted by the challenges raised about the viability of resilience research, social and behavioral scientists have persevered to address the myriad of questions raised, the most important of which is the definitional and thus operational aspects of resilience. This presentation, drawing from existing literature on resilience, underscores the diversity in approaches and perspectives in the study of resilience. The construct has been defined as both process and outcome, as multidimensional in its operational characteristics, and a key element in the prediction of human outcomes in the face of adversity. While the line of study has and continues to face challenges to the definitional nature of resilience, the literature also suggests the potential value of understanding why individuals are able to endure and develop positively in the face of

extreme odds. The literature summarized here points to the richness in the strategies taken and the noteworthy advances made in the study of resilience.

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